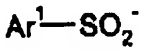
Amendments to the Claims:

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently amended) A composition comprising:

an electron donor comprising an arylsulfinate salt having a anion of Formula I



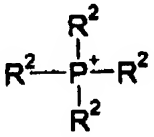
I

and a cation having at least one carbon atom and either a positively charged nitrogen atom or a positively charged phosphorus atom, said electron donor having an oxidation potential in N,N-dimethylformamide of 0.0 to +0.4 volts versus a silver/silver nitrate reference electrode, wherein

Ar^1 is a substituted phenyl, an unsubstituted or substituted C_{7-30} aryl, or an unsubstituted or substituted C_{3-30} heteroaryl, said substituted Ar^1 having a substituent that is an electron withdrawing group or an electron withdrawing group in combination with an electron donating group;

the cation is selected from

1) a phosphorous-containing cation of Formula III



III

where each R^2 is independently an unsubstituted alkyl, an alkyl substituted with a hydroxy, an unsubstituted aryl, or an aryl substituted with an alkyl, hydroxy, or combinations thereof; or

2) a nitrogen-containing cation having a ring structure comprising a 4 to 12 member heterocyclic group having a positively charged nitrogen atom, said heterocyclic being saturated or unsaturated and having up to 3 heteroatoms selected from oxygen, sulfur, nitrogen, or combinations thereof, wherein said ring structure is unsubstituted or substituted with

a substituent selected from an alkyl, aryl, acyl, alkoxy, aryloxy, halo, mercapto, amino, hydroxy, azo, cyano, carboxy, alkoxycarbonyl, aryloxycarbonyl, halocarbonyl, or combinations thereof; and

an electron acceptor having a reduction potential in N,N-dimethylformamide of +0.4 to –1.0 volts versus a silver/silver nitrate reference electrode.

2. (Withdrawn) The composition of claim 1, wherein the Ar^1 group of the arylsulfinate salt is anthryl, naphthyl, acenaphthyl, phenanthryl, phenanthrenyl, perylenyl, anthracenyl, anthraquinonyl, anthronyl, biphenyl, terphenyl, 9,10-dihydroanthracenyl, or fluorenyl, said Ar^1 group being unsubstituted or substituted with an electron withdrawing group or an electron withdrawing group in combination with an electron donating group.

3. (Withdrawn) The composition of claim 1, wherein the Ar^1 group of the arylsulfinate salt is quinolinyl, isoquinolinyl, quinazolinyl, quinoxalinyl, cinnolinyl, benzofuranyl, benzomercaptophenyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, indolyl, phthalazinyl, benzothiadiazolyl, benzotriazinyl, phenazinyl, phenanthridinyl, acridinyl, or indazolyl, said Ar^1 group being unsubstituted or substituted with an electron withdrawing group or an electron withdrawing group in combination with an electron donating group.

4. (Original) The composition of claim 1, wherein the Ar^1 group of the arylsulfinate salt is a substituted phenyl, an unsubstituted or substituted naphthyl, or an unsubstituted or substituted anthraquinonyl, said substituted Ar^1 having a substituent that is an electron withdrawing group or an electron withdrawing group in combination with an electron donating group.

5. (Original) The composition of claim 1, wherein the Ar^1 group is phenyl substituted with an electron withdrawing group selected from halo, cyano, fluoroalkyl, perfluoroalkyl, carboxy, alkoxycarbonyl, aryloxycarbonyl, halocarbonyl, formyl, carbonyl, sulfo, alkoxysulfonyl, aryloxysulfonyl, perfluoroalkylsulfonyl, alkylsulfonyl, azo, alkenyl, alkynyl, dialkylphosphonato, diarylphosphonato, aminocarbonyl, or combinations thereof.

6. (Original) The composition of claim 1, wherein the anion of the arylsulfinate salt is 4-chlorobenzenesulfinate, 4-cyanobenzenesulfinate, 4-ethoxycarbonylbenzenesulfinate, 4-trifluoromethylbenzenesulfinate, 3-trifluoromethylbenzenesulfinate, 1-anthraquinone sulfinate, 1-naphthalenesulfinate, or 2-naphthalenesulfinate.

7. (Withdrawn, Currently amended) The composition of claim 1, wherein the cation of the arylsulfinate salt is the ring structure comprising a ~~4 to 12 member heterocyclic group having a positively charged nitrogen atom, said heterocyclic being saturated or unsaturated and having up to 3 heteroatoms selected from oxygen, sulfur, nitrogen, or combinations thereof~~ a 5 member heterocyclic group, a 5 member heterocyclic group fused to an aromatic ring having 0 to 3 heteroatoms, a 6 member heterocyclic group, or a 6 member heterocyclic group fused to an aromatic ring having 0 to 3 heteroatoms, wherein said ring structure is unsubstituted or substituted with a substituent selected from an alkyl, aryl, acyl, alkoxy, aryloxy, halo, mercapto, amino, hydroxy, azo, cyano, carboxy, alkoxycarbonyl, aryloxycarbonyl, halocarbonyl, or combinations thereof.

8. (Withdrawn, Currently amended) The composition of claim [[7]] 1, wherein said heterocyclic group is bicyclic.

9. (Withdrawn, Currently amended) The composition of claim [[7]] 1, wherein said heterocyclic group is fused to a cyclic or bicyclic group that is saturated or unsaturated and that has 0 to 3 heteroatoms.

10. (Withdrawn, Currently amended) The composition of claim [[7]] 1, wherein said heterocyclic group is fused to an aromatic ring having 0 to 3 heteroatoms.

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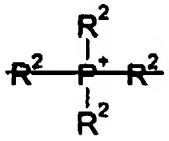
12. (Currently amended) The composition of claim 1, wherein the cation of the arylsulfinate salt is of Formula III



~~III~~

where each R^2 is independently ~~an unsubstituted alkyl, an alkyl substituted with a hydroxy,~~ an unsubstituted aryl[[,]] or an aryl substituted with an alkyl, hydroxy, or combinations thereof.

13. Cancel

14. Cancel

15. Cancel

16. Cancel

17. (Original) The composition of claim 1, wherein the electron acceptor is an iodonium salt, a hexaarylbisimidizole, a persulfate, a peroxide, or a metal ion in an oxidized state.

18. (Original) The composition of claim 1, further comprising a sensitizing compound capable of absorbing a wavelength of actinic radiation in the range of 250 to 1000 nanometer.

19. (Original) The composition of claim 18, wherein the electron acceptor is a diaryliodonium salt, a hexaarylbisimidizole, or combinations thereof.

20. (Original) The composition of claim 18, wherein the electron acceptor has an electron potential in the range of 0.0 to –1.0 volts versus a silver/silver nitrate reference electrode.

21. (Original) The composition of claim 1, further comprising an ethylenically unsaturated monomer.

22. (Original) The composition of claim 21, wherein the ethylenically unsaturated monomer comprises a monoacrylate, monomethacrylate, diacrylate, dimethacrylate, polyacrylate, polymethacrylate, or combinations thereof, wherein said monomer is unsubstituted or substituted with a hydroxy.

23. (Original) The composition of claim 18, wherein the composition further comprises a hydroxy-containing material selected from an alcohol, a hydroxy-containing monomer, or combinations thereof.

24. (Withdrawn, Currently amended) A method of photopolymerization comprising irradiating a photopolymerizable composition with actinic radiation until the photopolymerizable composition gels or hardens, said photopolymerizable composition comprising:

an ethylenically unsaturated monomer;

a sensitizing compound capable of absorbing a wavelength of actinic radiation in the range of 250 to 1000 nanometers;

an electron donor having an oxidation potential in N,N-dimethylformamide of 0.0 to +0.4 volts versus a silver/silver nitrate reference electrode, said electron donor comprising an arylsulfinate salt having an anion of Formula I

$$Ar^1—SO_2^-$$

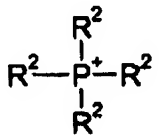
I

and a cation comprising at least one carbon atom and either a positively charged nitrogen atom or a positively charged phosphorus atom, wherein

Ar^1 is a substituted phenyl, an unsubstituted or substituted C_{7-30} aryl, or an unsubstituted or substituted C_{3-30} heteroaryl, said substituted Ar^1 having a substituent that is an electron withdrawing group or an electron withdrawing group in combination with an electron donating group;

the cation is selected from

1) a phosphorous-containing cation of Formula III



III

where each R^2 is independently an unsubstituted alkyl, an alkyl substituted with a hydroxy, an unsubstituted aryl, or an aryl substituted with an alkyl, hydroxy, or combinations thereof; or

2) a nitrogen-containing cation having a ring structure comprising a 4 to 12 member heterocyclic group having a positively charged nitrogen atom, said heterocyclic being saturated or unsaturated and having up to 3 heteroatoms selected from oxygen, sulfur, nitrogen, or combinations thereof, wherein said ring structure is unsubstituted or substituted with a substituent selected from an alkyl, aryl, acyl, alkoxy, aryloxy, halo, mercapto, amino, hydroxy, azo, cyano, carboxy, alkoxycarbonyl, aryloxycarbonyl, halocarbonyl, or combinations thereof; and

an electron acceptor having a reduction potential in N,N-dimethylformamide of +0.4 to –1.0 volts versus a silver/silver nitrate reference electrode, said electron acceptor being colorless when dissolved in an alcohol or the ethylenically unsaturated monomer.

25. (Withdrawn) The method of claim 24, wherein the anion of the arylsulfinate salt is 4-chlorobenzenesulfinate, 4-cyanobenzenesulfinate, 4-ethoxycarbonylbenzenesulfinate, 4-trifluoromethylbenzenesulfinate, 3-trifluoromethylbenzenesulfinate, 1-anthraquinone sulfinate, 1-naphthalenesulfinate, or 2-naphthalenesulfinate.

26. Cancel

27. (Withdrawn, currently amended) The method of claim 24, wherein the arylsulfinate salt has an anion that is a benzenesulfinate substituted with an electron withdrawing group electron selected from halo, cyano, fluoroalkyl, perfluoroalkyl, carboxy, alkoxycarbonyl, aryloxycarbonyl, halocarbonyl, formyl, carbonyl, sulfo, alkoxysulfonyl, aryloxysulfonyl, perfluoroalkylsulfonyl,

alkylsulfonyl, azo, alkenyl, alkynyl, dialkylphosphonato, diarylphosphonato, aminocarbonyl, or combinations thereof ~~and the cation is a tetraalkylammonium ion~~.

28. (Withdrawn) The method of claim 24, wherein the electron acceptor is an iodonium salt, a hexaarylbisimidizole, or combinations thereof.

29. (Withdrawn) The method of claim 24, wherein the electron acceptor is a diaryliodonium salt.

30. (Withdrawn, Currently amended) The method of claim 24, wherein the photopolymerizable composition comprises 0.1 to 4 wt% electron donor, 0.1 to 4 wt% electron acceptor, and 5 ppm to 4 wt% sensitizing compound based on the weight of the monomer.

31. (Withdrawn) The method of claim 24, wherein the ethylenically unsaturated monomer comprises a hydroxy-containing monomer.

32. (Withdrawn) The method of claim 24, wherein the photopolymerizable composition further comprises an alcohol.

33. (Withdrawn, Currently amended) A method of polymerization comprising:

forming a polymerizable composition comprising

an ethylenically unsaturated monomer;

an electron donor having an oxidation potential in N,N-dimethylformamide of 0.0 to +0.4 volts versus a silver/silver nitrate reference electrode, said electron donor comprising an arylsulfinate salt having an anion of Formula I

$$Ar^1—SO_2^-$$

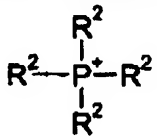
I

and a cation that contains at least one carbon atom and either a positively charged nitrogen atom or a positively charged phosphorus atom, wherein

Ar^1 is a substituted phenyl, an unsubstituted or substituted C_{7-30} aryl, or an unsubstituted or substituted C_{3-30} heteroaryl, said substituted Ar^1 having a substituent that is an electron withdrawing group or an electron withdrawing group in combination with an electron donating group;

the cation selected is from

1) a phosphorous-containing cation of Formula III



III

where each R^2 is independently an unsubstituted alkyl, an alkyl substituted with a hydroxy, an unsubstituted aryl, or an aryl substituted with an alkyl, hydroxy, or combinations thereof; or

2) a nitrogen-containing cation having a ring structure comprising a 4 to 12 member heterocyclic group having a positively charged nitrogen atom, said heterocyclic being saturated or unsaturated and having up to 3 heteroatoms selected from oxygen, sulfur, nitrogen, or combinations thereof, wherein said ring structure is unsubstituted or substituted with a substituent selected from an alkyl, aryl, acyl, alkoxy, aryloxy, halo, mercapto, amino, hydroxy, azo, cyano, carboxy, alkoxycarbonyl, aryloxycarbonyl, halocarbonyl, or combinations thereof;

an electron acceptor having a reduction potential in N,N-dimethylformamide of +0.4 to –1.0 volts versus a silver/silver nitrate reference electrode; and

reacting the polymerizable composition.

34. (Withdrawn) The method of claim 33, wherein the electron acceptor is a persulfate, a peroxide, a metal ion in an oxidized state, or a combination thereof.

35. (Withdrawn) The method of claim 34, wherein said reacting comprises applying heat.

36. (Withdrawn) The method of claim 33, wherein the anion of the arylsulfinate salt is 4-chlorobenzenesulfinate, 4-cyanobenzenesulfinate, 4-ethoxycarbonylbenzenesulfinate, 4-

trifluoromethylbenzenesulfinate, 3-trifluoromethylbenzenesulfinate, 1-anthraquinone sulfinate, 1-naphthalenesulfinate, or 2-naphthalenesulfinate.

37. (Withdrawn, Currently amended) The method of claim 33, wherein the arylsulfinate salt has an anion that is a benzenesulfinate substituted with an electron withdrawing group selected from halo, cyano, fluoroalkyl, perfluoroalkyl, carboxy, alkoxycarbonyl, aryloxycarbonyl, halocarbonyl, formyl, carbonyl, sulfo, alkoxysulfonyl, aryloxysulfonyl, perfluoroalkylsulfonyl, alkylsulfonyl, azo, alkenyl, alkynyl, dialkylphosphonato, diarylphosphonato, aminocarbonyl, or combinations thereof ~~and the cation is a tetraalkylammonium ion~~.

38. (Withdrawn) The method of claim 33, wherein the polymerizable composition comprises 0.1 to 4 wt% electron donor and 0.1 to 4 wt% electron acceptor based on the weight of the ethylenically unsaturated monomer.

39. (Withdrawn) The method of claim 33, wherein the polymerizable composition further comprises a sensitizing compound and said reacting comprises exposing the polymerizable composition to actinic radiation having a wavelength in the range of 250 to 1000 nanometers.

40. (New) The composition of claim 1, wherein the cation comprises tetraphenylphosphonium that is unsubstituted or substituted.

41. (New) The composition of claim 1, wherein the cation comprises an imidazolium ion or oxazolium ion that is unsubstituted or substituted.

42. (New) The composition of claim 1, wherein the cation comprises benzoxazolium ion or benzothiazolium ion that is unsubstituted or substituted.

43. (New) The composition of claim 1, wherein the cation comprises a pyridinium ion or morpholinium ion that is unsubstituted or substituted.

44. (New) The composition of claim 1, wherein the cation comprises N-alkylated 1,4-diazabicyclo [2.2.2] octane, N-protonated 1,4-diazabicyclo [2.2.2] octane, N-alkylated 1-azabicyclic [2.2.2] octane, or N-protonated 1,4-diazabicyclo [2.2.2] octane that is unsubstituted or substituted.